



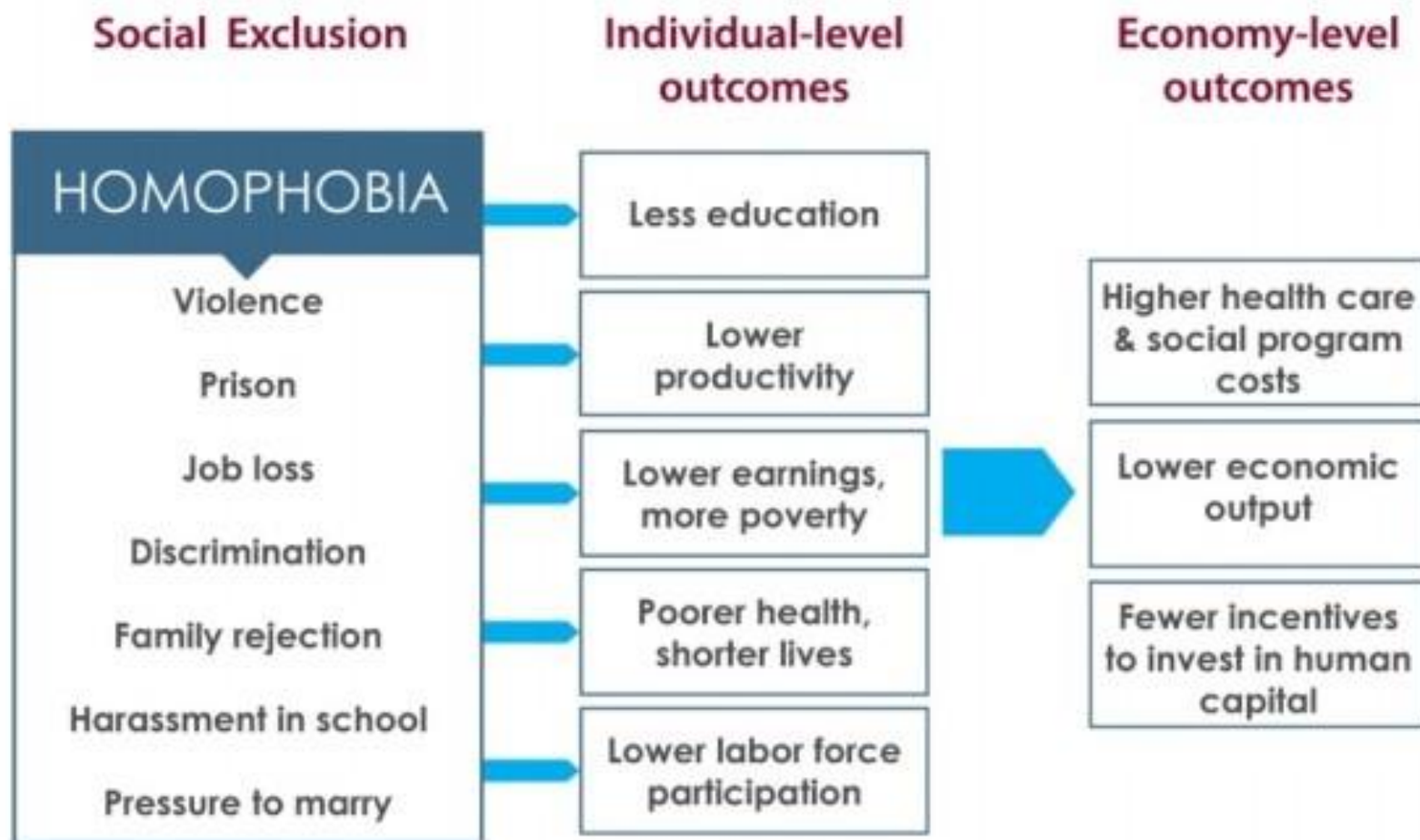
Improving People's Lives Through Innovations in Personalized Health Care

Transgender Primary Care

Andrew Keaster, MD
April 27, 2016



THE OHIO STATE UNIVERSITY
WEXNER MEDICAL CENTER



M.V. Lee Badgett/World Bank



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Outline and Objectives

1. Case Presentation
2. Terminology
3. Epidemiology
4. Primary care
5. Hormones
6. Gender Reassignment Surgery




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CC: 19 year old natal female referred by psychologist who presents to discuss hormone therapy


HPI:

Patient has been desiring cross sex hormone therapy for many years. He has never felt comfortable with being thought of as a girl and this discomfort increased during puberty.




19 yo transgender man
(FtM) with gender
dysphoria seeking
hormones for transition

- **Past medical history**
 - Acne
 - Depression/ anxiety
 - ADHD
- **Medications**
 - Benzoyl peroxide lotion
 - Citalopram 20 mg daily
 - Methylphenidate 27 mg CR
- **Surgical history**
 - Tonsillectomy
- **Family history**
 - Father- HTN, HLD, CVA
 - Mother- diabetes



19 yo transgender man
(FtM) with gender
dysphoria seeking
hormones for transition

- **Social history**
 - No smoking
 - No alcohol use
 - No drugs
 - Has never been sexually active
 - Accepted by family. Lives with parents and younger brother
 - Recently started working at a retail store
 - Not interested in having children



19 yo transgender man
(FtM) with gender
dysphoria seeking
hormones for transition

Prefers Mark, male pronouns.
Legal name Sarah.

Medical: Natal female. Dysphoria since age 5. Began identifying as man at age 17. Living fully as man since 18. Plans for transition include legal name and document change, hormones, mastectomy, TAHBSO. Wants to store eggs: no.

Mental: Sees counselor every 2 weeks. Comorbid depression and anxiety on lexapro. Suicide attempts: none



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Review of Systems

19 yo transgender man
(FtM) with gender
dysphoria seeking
hormones for transition

Constitutional: No fever, chills, change in weight or appetite, malaise/fatigue

Skin: **acne**; no other skin changes

HENT: No congestion or sore throat

Eyes: No blurry or diminished vision

Cardiovascular: No chest pain, palpitations

Respiratory: No cough or shortness of breath

Gastrointestinal: No nausea, vomiting, abdominal pain, diarrhea, constipation

Genitourinary: No dysuria, frequency, hesitancy, hematuria

Musculoskeletal: No joint pains, no decreased range of motion

Neurological: no dizziness, no seizures, no headaches, no weakness, no confusion

Psychiatric: **history of depression, anxiety, and ADHD**

Allergy/Immunology: No environmental allergies or urticaria

Endocrine: No polydipsia or polyuria, no cold/heat intolerance



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Physical Exam

19 yo transgender man
(FtM) with gender
dysphoria seeking
hormones for transition

Blood pressure 98/60, pulse 74, temperature 98.4 degrees F (36.9 degrees C), temperature source Oral, resp. rate 16, height 1.651 m (5' 5"), weight 53.978 kg (119 lb), last menstrual period 09/25/2014.

General: NAD, A&O, good eye contact, well appearing, responds appropriately, dressed in male clothing, thin

HEENT: Atraumatic, normocephalic. Face symmetric. EOMI, sclerae anicteric. Mucous membranes moist. No cervical or supraclavicular lymphadenopathy.

Thoracic: No visible chest wall deformities. Normal breath sounds b/l, no wheezing or crackles.

Cardio: Normal S1 and S2, regular rate and rhythm.

Abdomen: Soft, nontender, nondistended. Bowel sounds present.

Extremities: No clubbing, cyanosis, or edema.

MSK: No spinous process tenderness. Able to ambulate.

Skin: Intact. No rashes, bruises, or ulcers.

Erythematous papules present on face

Neuro: Mental Status: Alert, oriented. Good memory, concentration, and attention. Speech fluent. CN II-XII intact. Strength 5/5 in b/l UE and LE. Gait normal.

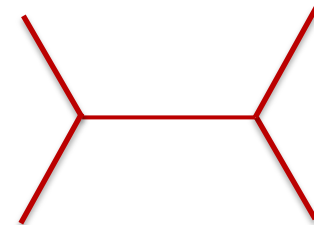
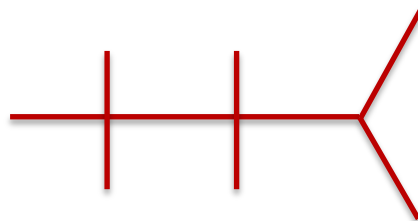


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Laboratory Tests

19 yo transgender
man (FtM) with
gender dysphoria
seeking hormones
for transition



What labs do we need in order to
diagnose this patient?

None!



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Imaging

19 yo transgender man
(FtM) with gender
dysphoria seeking
hormones for transition

What imaging do we need in order
to diagnose this patient?

None!



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Final Diagnosis

Gender Dysphoria

ICD-9 302.6

ICD-10 F64.1

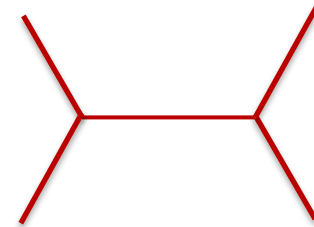
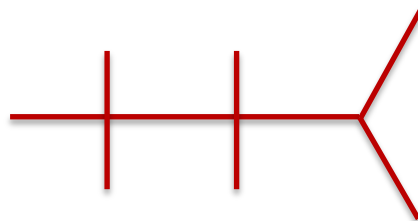


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Laboratory Tests

19 yo transgender man
(FtM) with gender
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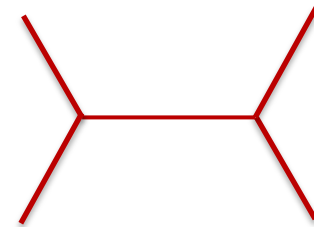
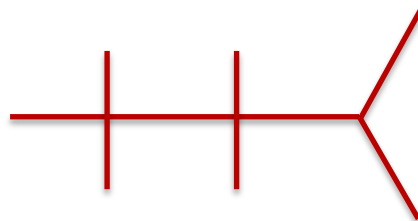
What labs might we need in order
to monitor and treat this patient?



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Laboratory Tests

19 yo transgender man
(FtM) with gender
dysphoria seeking
hormones for transition



What labs might we need in order
to monitor and treat this patient?

CBC

LDL/HDL

Chem6

LFTs

A1C

Testosterone

TSH

HIV and other STD screening



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Transgender Care

Definition

Terminology

Epidemiology

Primary Care

Hormones

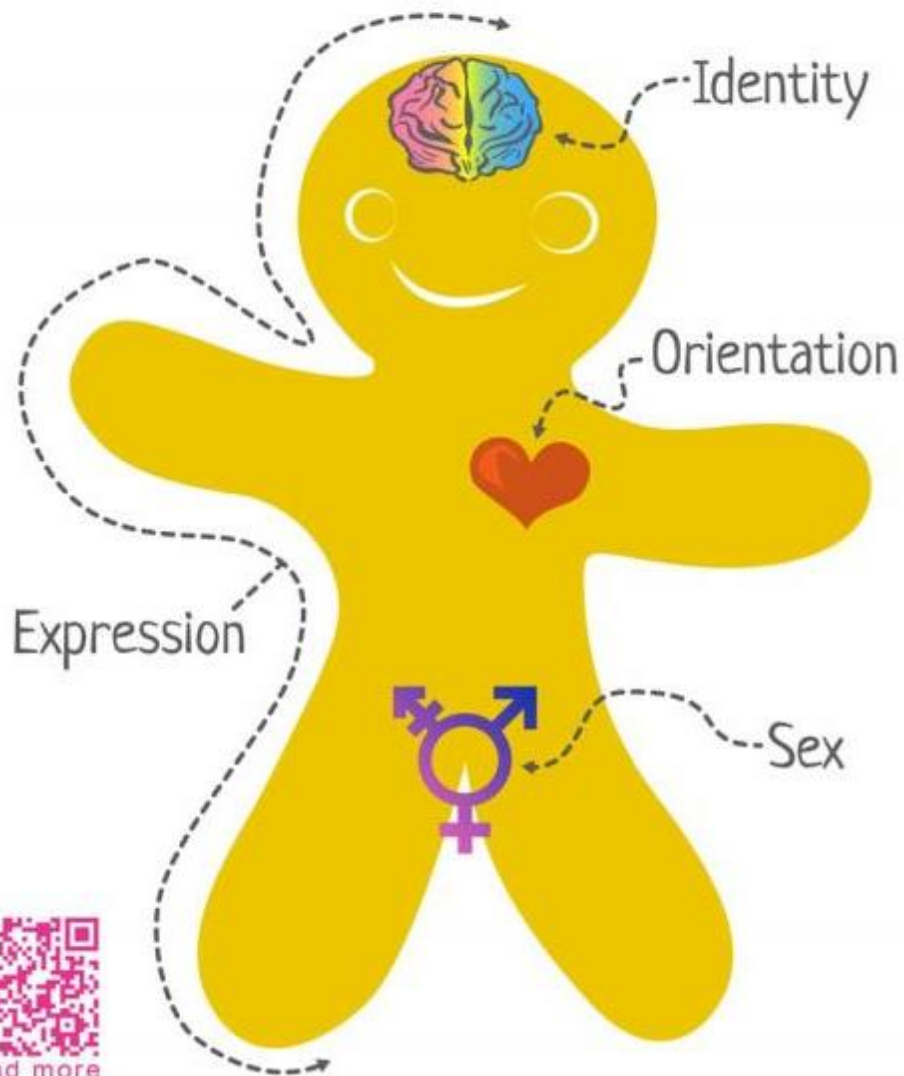
Sex Reassignment Surgery

- **Gender Dysphoria in Adolescents and Adults 302.85**
- A marked **incongruence** between one's **experienced**/ expressed gender and **assigned** gender, of at least 6 months' duration, as manifested by at least two of the following:
 - A marked incongruence between one's experienced/expressed **gender** and primary and/or secondary **sex characteristics** (or in young adolescents, the anticipated secondary sex characteristics).
 - A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender (or in young adolescents, a desire to prevent the development of the anticipated secondary sex characteristics).
 - A strong desire for the primary and/or secondary sex characteristics of the other gender.
 - A strong desire to be of the other gender (or some alternative gender different from one's assigned gender).
 - A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender).
 - A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender).
- The condition is associated with clinically significant **distress** or impairment in social, occupational, or other important areas of functioning.



The Genderbread Person

by www.ItsPronouncedMetrosexual.com



Gender Identity

Woman

Genderqueer

Man

Gender identity is how you, in your head, think about yourself. It's the chemistry that composes you (e.g., hormonal levels) and how you interpret what that means.



Gender Expression

Feminine

Androgynous

Masculine

Gender expression is how you demonstrate your gender (based on traditional gender roles) through the ways you act, dress, behave, and interact.



Biological Sex

Female

Intersex

Male

Biological sex refers to the objectively measurable organs, hormones, and chromosomes. Female = vagina, ovaries, XX chromosomes; male = penis, testes, XY chromosomes; intersex = a combination of the two.



Sexual Orientation

Heterosexual

Bisexual

Homosexual

Sexual orientation is who you are physically, spiritually, and emotionally attracted to, based on their sex/gender in relation to your own.



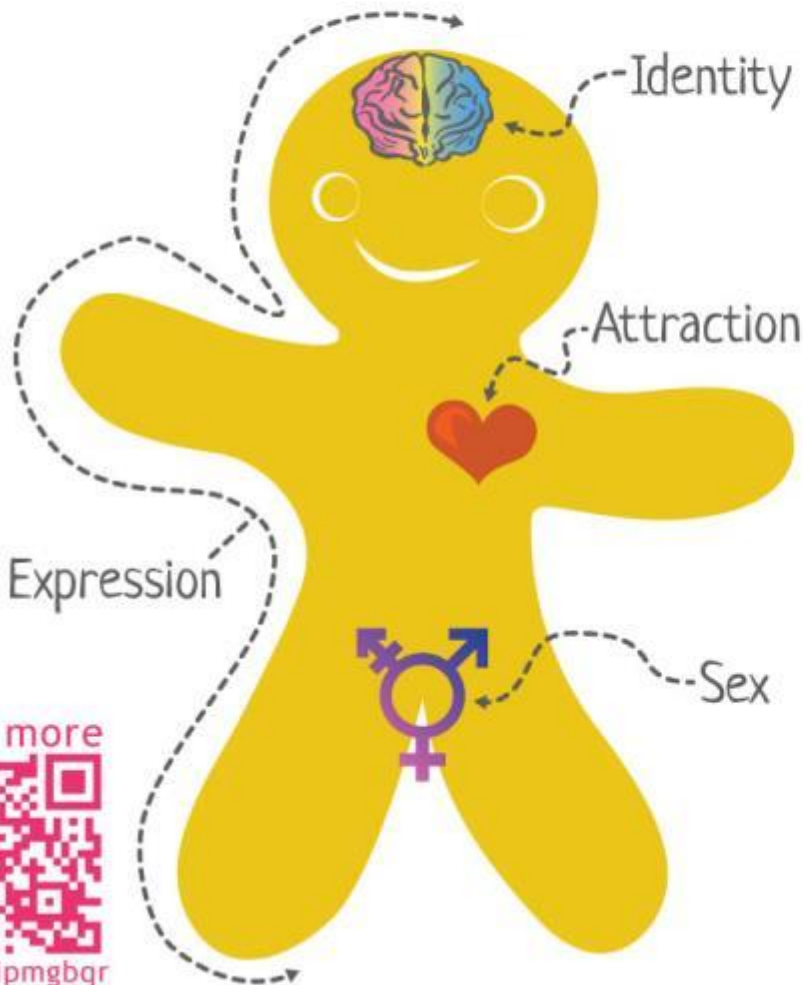
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WEAVER MEDICAL CENTER

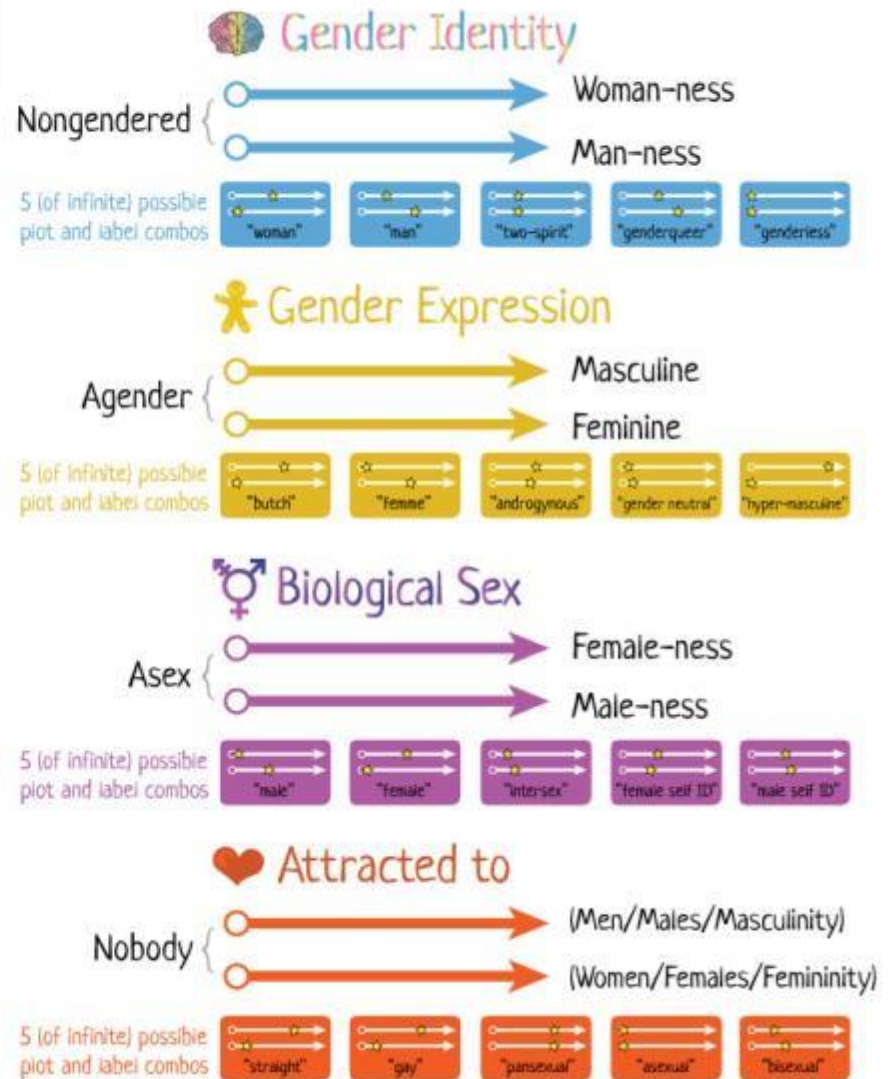
The Genderbread Person v2.0 *by its pronounced METROsexual.com*

Gender is one of those things everyone thinks they understand, but most people don't. Like *Inception*. Gender isn't binary. It's not either/or. In many cases it's both/and. A bit of this, a dash of that. This tasty little guide is meant to be an appetizer for understanding. It's okay if you're hungry for more.



read more

bit.ly/ipmgbqr



Definitions

Transgender: people who identify and/or express their gender as the opposite of their biologic birth sex

Transgender persons choose to present themselves in a variety of ways

- Some medically or surgically alter their body to affirm their gender identity
- Some change hair/dress
- Some make no changes to their appearance
- Many will change their given name

Sexual orientation and gender identity are *separate* concepts

- A transgender person might consider themselves straight, GLB, neither, other, etc.



Terminology

- **Gender Identity:** the sense of one's self as male or female.
- **Gender expression:** the expression of gender through dress, hairstyle, mannerisms, or other.
- **Female-to-Male (FTM):** the trajectory of a person who is changing or has changed their body and lived gender role from a birth-assigned female to an affirmed male. Also, trans male, trans man, or transman.
- **Male-to-Female (MTF):** the trajectory of a person who is changing or has changed their body and lived gender role from a birth-assigned male to an affirmed female. Also, trans woman or transwoman.



Terminology

- **Genderqueer:** one who defies or does not accept stereotypical gender roles and may choose to live outside expected gender norms. Genderqueer people may or may not wish to pursue hormonal or surgical treatments.
- **Transgender:** literally "across gender"; sometimes interpreted as "beyond gender"; a community-based term that describes a wide variety of cross-gender behaviors and identities. This is not a diagnostic term, and does not imply a medical or psychological condition. Avoid using this term as a noun: a person is not "a transgender"; they may be a transgender person.



NATIONAL TRANSGENDER DISCRIMINATION SURVEY

- 2011 survey of 6,450 transgender and gender non-conforming individuals
- Racially and socioeconomically diverse sample
- Respondents from all 50 states
- Survey topics include: Education, Employment, Health, Family Life, Housing, Public Accommodations, Identification Documents, and Police and Incarceration

Grant, Jaime M., Lisa A. Mottet, Justin Tanis, Jack Harrison, Jody L. Herman, and Mara Keisling. *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*. Washington: National Center for Transgender Equality and National Gay and Lesbian Task Force, 2011.



Key NON-HEALTH Findings for Ohio

- 81% Harassment at work
- 86% Harassment at school
- 40% Physical assault at school
- 14% Sexual violence at school
- 17% were unemployed compared to 7% of nation at time of survey
- 13% had become homeless because of their gender identity
- 39% reported being uncomfortable seeking police assistance



Health Care findings for Ohio

- 21% were refused medical care due to their gender identity
- 27% postponed seeking care when sick or injured due to discrimination
- 1.03% were HIV positive, compared to 0.6% of general population
- 34% had employer-based health insurance, compared to 59% of the general population
- **44% reported attempting suicide at some point, compared to 1.6% of the general population**
- Risk of being a victim of violence

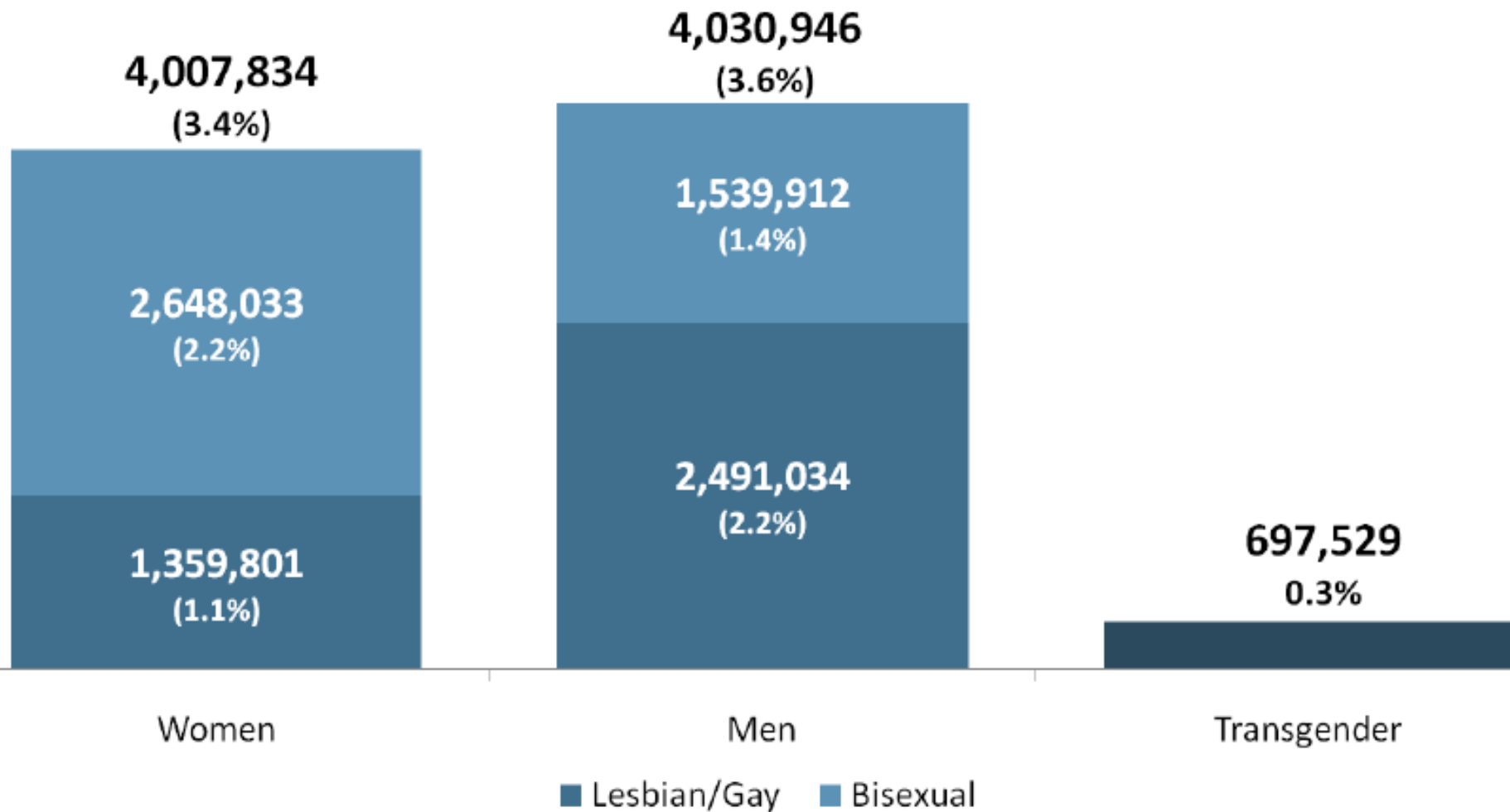


Direct from the CDC

- In 2013, a meta-analysis (Baral et al.) reported that the estimated HIV prevalence among transgender women was 22% in five high-income countries, including the United States.
- Findings from a systematic review (Herbst et al.) of 29 published studies showed that 28% of transgender women had HIV infection (4 studies), while 12% of transgender women self-reported having HIV (18 studies). This discrepancy suggests many transgender women living with HIV don't know their HIV status.
- In the systematic review, black/African American transgender women were most likely to test HIV positive, compared to those of other races/ethnicities: 56% of black/African American transgender women had positive HIV test results compared to 17% of white or 16% of Hispanic/Latina transgender women.
- Among the 3.3 million HIV testing events^a reported to CDC in 2013, the highest percentages of newly identified HIV-positive persons were among transgender persons.
- Although HIV prevalence among transgender men is relatively low (0-3%), a 2011 study (Rowniak et al.) suggests that transgender men who have sex with men are at substantial risk for acquiring HIV.
- <http://www.cdc.gov/hiv/group/gender/transgender/>



LGBT Demographics



LGBT in Columbus

“From the obvious (San Francisco) to the surprising (Columbus), Richard Florida and Gary Gates crunched the numbers to rank the top gay cities in the country”

Estimated gay & lesbian population in Columbus:

68,300 or 5.8%

Developed by [Gary Gates](#), a demographer at UCLA’s [Williams Institute](#), the Gay/Lesbian Index value tells you how the proportion of same-sex couples among all households of a given metro area compares to the average for the entire U.S.



What does a PCP need to know?

- WPATH

- Transgender Health Provider Certification
- Standards of Care, version 7
- http://www.wpath.org/site_page.cfm?pk_association_webpage_menu=1351&pk_association_webpage=3926

- UCSF Center for Transgender Excellence

- Primary Care Protocols
- <http://transhealth.ucsf.edu/trans?page=protocol-00-00>

- Callen Lorde Community Health Center

- Protocols for the Provision of Cross-Gender Hormone Therapy
- <http://callen-lorde.org/transhealth/>





Communicating with Transgender Persons

Follow their lead: *How do they describe themselves? Their partners?*

Ask them what terms they prefer. Be curious.

Communicate openly with your patients without fear of offending.

If you “slip up”, apologize.

Use inclusive language.

Avoid assumptions.

Frequently assess your own level of comfort and preconceptions.



Primary Care Priorities

1. Access to Healthcare
2. Health History
3. Hormones
4. Heart health
5. Cancer
6. **STDs, sexual health, fertility**
7. Alcohol and Tobacco
8. Depression/ Anxiety
9. Injectable Silicone
10. Fitness (Diet & Exercise)

Screen: HIV, Syph, G/C, *HCV

Immunizations: HAV, HBV, HPV

Prevention: PrEP

Based on GLMA's Top 10 list for Trans Persons to ask their PCP



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Hormone Therapy

Hormones – Assessing Readiness

Traditional “Letter” Model

Informed Consent



Female-to-Male (FtM) Hormones

Testosterone 200 mg IM q2wk or 100 mg IM q1wk

- 200 mg/ml concentration, 10 ml vial lasts 20 weeks

Baseline labs:

- Chem6, LFTs, CBC, Lipid panel, A1C
- Testosterone, TSH
- HIV, hepatitis, syphilis



FtM Time Course

Effect	Onset (months)*	Maximum (yr)*
Skin oiliness/acne	1 to 6	1 to 2
Facial/body hair growth	6 to 12	4 to 5
Scalp hair loss	6 to 12	•
Increased muscle mass/strength	6 to 12	2 to 5
Fat redistribution	1 to 6	2 to 5
Cessation of menses	2 to 6	Δ
Clitoral enlargement	3 to 6	1 to 2
Vaginal atrophy	3 to 6	1 to 2
Deepening of voice	6 to 12	1 to 2



FtM Complications

- Acne
- Thrombophlebitis and DVT
- Emotional lability / aggression
- Headache
- HTN
- Polycythemia
- Infertility
- Hepatitis
- Overly increased libido
- Drug interactions
- Male pattern baldness
- Abdominal fat - redistributed to male shape
- Risk of heart disease
- swelling of hands, feet, and legs
- weight gain



Male-to-Female (MtF) Hormones

Contraindication: Estrogen Dependent Cancer, DVT/PE

Estradiol 1-4 mg PO daily

Spironolactone 100 mg PO daily

Baseline Labs:

- Chem6, LFTs, CBC, Lipid panel, A1c
- TSH
- HIV, hepatitis, syphilis



MtF Time Course

Effect	Onset*	Maximum*
Redistribution of body fat	3 to 6 months	2 to 3 years
Decrease in muscle mass and strength	3 to 6 months	1 to 2 years
Softening of skin/decreased oiliness	3 to 6 months	Unknown
Decreased libido	1 to 3 months	3 to 6 months
Decreased spontaneous erections	1 to 3 months	3 to 6 months
Male sexual dysfunction	Variable	Variable
Breast growth	3 to 6 months	2 to 3 years
Decreased testicular volume	3 to 6 months	2 to 3 years
Decreased sperm production	Unknown	>3 years
Decreased terminal hair growth	6 to 12 months	>3 years*
Scalp hair	No regrowth	Δ
Voice changes	None	◇



MtF Complications

- Permanent feminine appearance
- Permanent breast growth
- DVT/PE
- Gallstones
- Prolactinoma
- Migraine
- HTN
- Hepatitis
- Infertility
- Medication interactions
- Hyperkalemia
- Dehydration
- Hair loss



Hormone Therapy

- 62% have had hormone therapy, additional 23% hope to have it in the future



General Principles

1. When starting new medication, start at half dose
2. Reassess after 1 month with labs and H&P prior to increasing to full dose
3. Reassess 1 month later at full dose
4. Reassess patient 3 months later
5. Reassess every 6-12 months
6. Maintain a harm reduction approach and be open to negotiation at every step



Sex Reassignment Surgery (SRS)

Gender Affirming Surgery

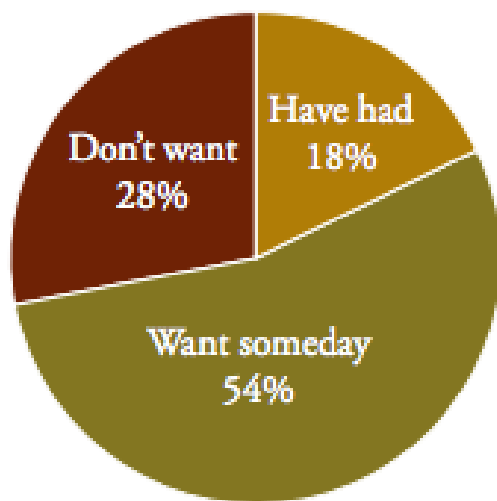
	Male-to-Female	Female-to-Male
Misc surgery	Tracheal Shave Facial Feminization	
“Top” surgery	Breast Augmentation	Chest Reconstruction
“Bottom” surgery	Orchiectomy	Hysterectomy Oophorectomy Vaginectomy
Genital sex reassignment	Vaginoplasty	Phalloplasty Metoidioplasty



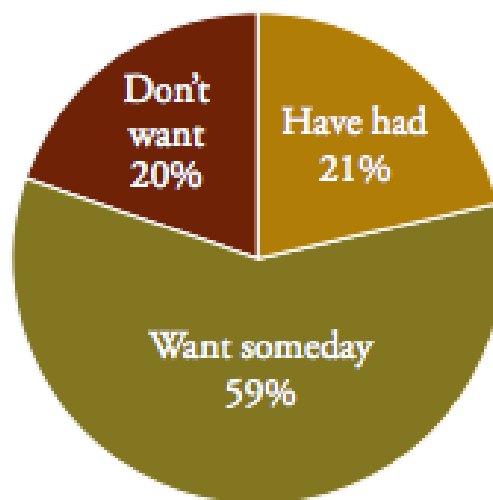
Transgender-related Care

- Surgeries – Male-to-female

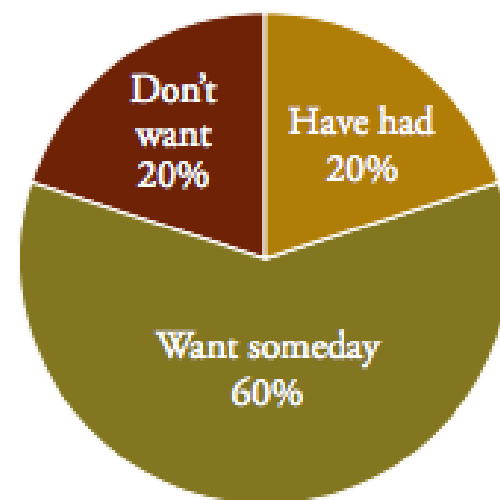
MTF Chest Surgery



MTF Orchiectomy



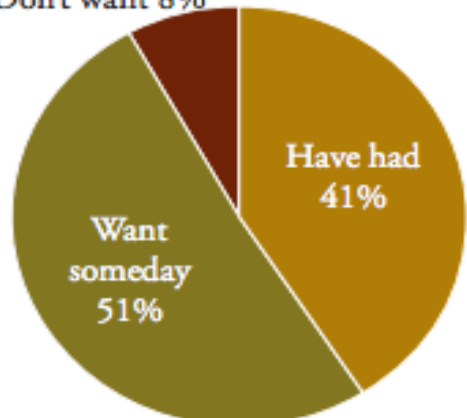
MTF Vaginoplasty



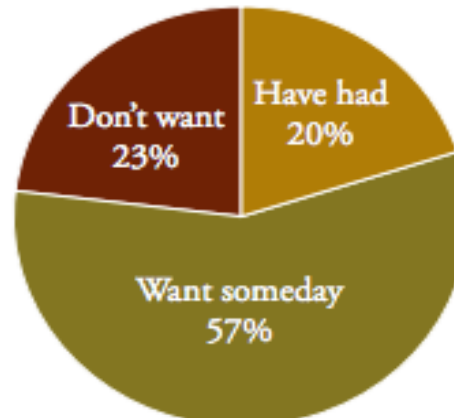
■ Surgeries – Female-to-male

FTM Chest Surgery

Don't want 8%

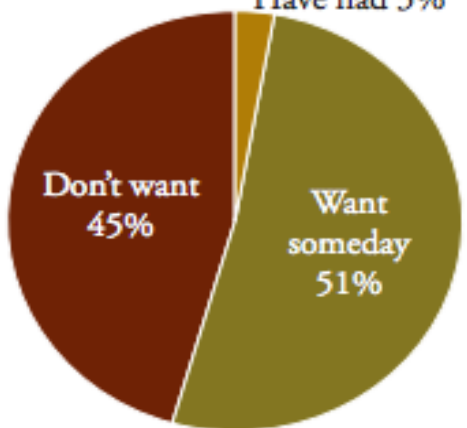


FTM Hysterectomy



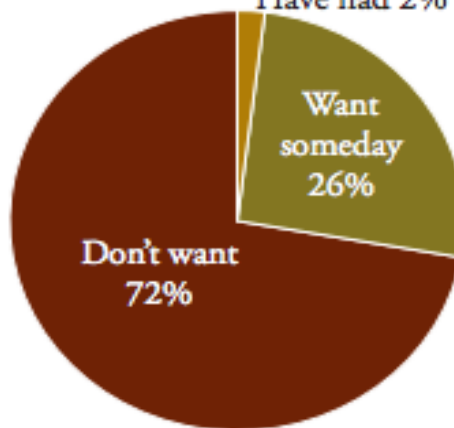
FTM Metoidoplasty/ Creation of Testes

Have had 3%



FTM Phalloplasty

Have had 2%



Identity Documents

- Two common requests:
 - Gender marker change on Driver's License
 - Signature endorsing Gender Change is “Complete”
 - <http://ai.eecs.umich.edu/people/conway/TS/News/US/OhioBMVGenderChangeForm2009.pdf>
 - Letter for Social Security
 - Requires statement “*I declare under penalty of perjury that patient “has had appropriate clinical treatment for gender transition to the new gender”*”
 - <http://www.transequality.org/know-your-rights/social-security>



Returning to the case...

- Since establishing care, our patient has legally changed his name, he has come out at work, and states that his mental health has improved significantly since starting on testosterone.
- His biggest side effect/ concern is increased acne which has been managed by intensifying his acne treatment regimen.



INTRODUCING



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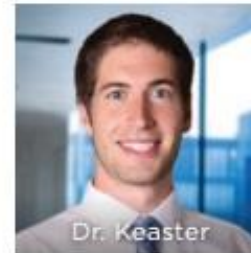
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Transgender Primary Care Clinic

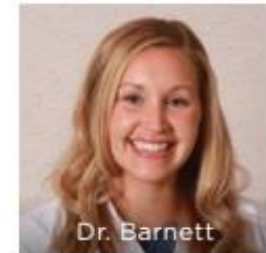
Call **614-688-6490** to schedule an appointment with Dr. Keaster and Dr. Barnett

OSU CarePoint East

Department of Family Medicine, 2nd Floor
543 Taylor Ave
Columbus, OH 43202



Dr. Keaster



Dr. Barnett

We aim to serve Central Ohio's transgender population by:

- Providing culturally competent primary care
- Managing medical transition and hormone therapy
- Developing a network of referral services including mental health, endocrinology, surgery, etc

Give us a call today!

Drs. Barnett and Keaster are currently taking new patients for primary care.

Please call **614-688-6490** to schedule an appointment!



Final Summary

Respect the self-identification of transgender patients (name and pronouns)

Screen and treat concomitant mental health disorders

Do not be afraid to ask questions in a respectful manner



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Resources

Callen Lorde Protocols

UCSF Primary Care Protocols

WPATH Standards of Care

Gay and Lesbian Medical Association

UpToDate.com

Ohio BMV

Transequality.org

Resources for Providers

- WPATH
 - Transgender Health Provider Certification
 - Standards of Care, version 7
 - http://www.wpath.org/site_page.cfm?pk_association_webpage_menu=1351&pk_association_webpage=3926
- UCSF Center for Transgender Excellence
 - Primary Care Protocols
 - <http://transhealth.ucsf.edu/trans?page=protocol-00-00>
- Callen Lorde Community Health Center
 - Protocols for the Provision of Cross-Gender Hormone Therapy
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Questions?

